



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/971,880	10/03/2001	Dennis Frank Haynes	RSW920010191US1	4572
7590	07/08/2005		EXAMINER	
			ZURITA, JAMES H	
			ART UNIT	PAPER NUMBER
			3625	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/971,880	HAYNES ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	James H Zurita	3625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 21 March 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) 2-8 are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/09/01
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Election/Restrictions***

Applicant filed claims 1-8 on 3 October 2001.

In a First Office Action of 10 March 2005, the Examiner issued an Election/Restriction Requirement. Applicant's election without traverse of Invention I in the reply filed on 21 March 2005 is acknowledged.

Claim 1 is pending and will be examined.

### ***Claim Objections***

#### Shopping carts [abandoned / active / inactive]

Claim 1 refers to **abandoned shopping carts** (preamble) and **shopping carts** (body of claim). In the specification, applicant appears to use the two terms interchangeably and also uses [active / inactive] shopping cart as indication that a shopping cart has become abandoned. In paragraph 3, for example, applicant refers to shopping carts that appear to be abandoned but are instead active:

Abandoned shopping carts are not easily detected. Some shoppers fill their carts slowly; consequently, some carts that appear to be abandoned are instead active, and a hasty decision might mistakenly tag these slowly filled but active carts as abandoned.

In paragraph 8, applicant appears to define abandoned shopping carts as shopping carts that have been inactive for more than a particular period of time.

Periodically, the number of guest shoppers with shopping carts is determined and compared with a guest shopper threshold. When the number of guest shoppers with shopping carts exceeds the guest shopper threshold, a guest shopper garbage collection routine applies to the shopping carts that belong to the guest shoppers, and an established shopper garbage collection routine applies to other shopping carts that belong to the established shoppers. In one embodiment of the invention, the guest shopper garbage collection routine purges shopping carts that have been inactive for more than a first period of time, for example fifteen minutes, whereas the established

shopper garbage collection routine purges shopping carts that have been inactive for more than a second period of time, for example three months.

However, Paragraph 9 appears to imply that inactive carts belonging to one type of user are not abandoned:

[0009] Thus, shopping carts that belong to established shoppers, who may be those shoppers most likely to place an order rather than abandon a shopping cart, are subject to a different garbage collection routine than guest shoppers. As a result, shopping carts abandoned by guest shoppers are quickly purged from the web server, and the performance of the web server thereby improved, without risking the alienation of established shoppers or loss of sales.

A shopping cart is a file in which an online customer stores information on potential purchases until ready to order.<sup>1</sup> For purposes of this examination, the term shopping cart and abandoned shopping cart will be given their broadest reasonable interpretation to refer to file(s) and/or record(s) in which an online customer stores information on potential purchases until ready to order and which has been inactive for designated periods of time.

#### Guest shopper and established shopper

The terms **established shopper** and **guest shopper** do not, per se, provide patentable distinction from prior art. For purposes of this examination, the terms will be given their broadest reasonable interpretation to refer to various classes of shoppers whose attributes are determined according to various criteria.

#### Garbage collection routine

**Garbage collection** is a process for automatic recovery of **heap** memory;<sup>2</sup> heap is a portion of memory reserved for a program to use for the temporary storage of data

---

<sup>1</sup> Definition of *shopping cart*, MICROSOFT PRESS Computer Dictionary.

<sup>2</sup> Definition of *garbage collection*, MICROSOFT PRESS Computer Dictionary.

structures whose existence or size cannot be determined until the program is running.<sup>3</sup> Applicant appears to use the term garbage collection [routine] in a generic sense, since Applicant does not appear to restrict his invention to *heap* memory. For purposes of this examination, the Examiner will interpret garbage collection routine as routines that are run to purge (i.e., delete) files after a period of time.

For purpose of this examination, the terms *guest shopper garbage collection routine* and *established shopper garbage collection routine* will be given their broadest reasonable interpretation to mean executing generic routine(s) that delete or purge a file in which an online customer stores information on potential purchases until ready to order and which have been inactive for designated periods of time.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marks (US 6,876,977).

As per claim 1, **Marks** discloses methods for purging abandoned shopping carts from an electronic commerce web site:

---

<sup>3</sup> Definition of *heap*, MICROSOFT PRESS Computer Dictionary.

***identifying shopping carts*** that belong to various types of groups (applicant's guest shopper and established shoppers) of an electronic commerce web site, and purging abandoned shopping carts, as in Col. 1, lines 27-50.

- classifying shoppers according to various criteria. See, for example, references to registrant attributes, as in Fig. 3, 4 and related text.

***applying routine(s) to purge*** shopping carts of various different shoppers, upon expiration of possibly different time periods. See, for example, at least Col. 2, lines 27-58.

**Marks** does not use the terms *guest shopper*, *established shopper*, *guest shopper garbage collection routine*, *established shopper garbage collection routine*.

However, the labels given to various actors and modules are not functionally related to the substrate of the article of manufacture. The labels themselves carry little or no patentable weight. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply a label to various actors and modules in a system such as Marks because such data does not functionally relate to the substrate of the article of manufacture and merely labeling the data differently from that in the prior art would have been obvious. See *Gulack* cited above.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tobias Ratschiller, 15 March 2000, Session Handling with PHP 4, downloaded from the Internet on 26 June 2005, 12 pages.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Zurita whose telephone number is 571-272-6766. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wynn Coggins can be reached on 571-272-7159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**James Zurita  
Patent Examiner  
Art Unit 3625  
28 June 2005**

*James Zurita  
Patent Examiner  
Art 3625*